

No. 5,424,186); which is a continuation-in-part of USSN 07/492,462 (filed March 7, 1990, now U.S. Patent No. 5,143,854); which is a continuation-in-part of USSN 07/362,901 (filed June 7, 1989, now abandoned). USSN 07/805,727 (filed December 6, 1991, now U.S. Patent No. 5,424,186) is also a continuation-in-part of USSN 07/624,120 (filed December 6, 1990, now abandoned); which is a continuation-in-part of USSN 07/492,462 (filed March 3, 1990, now U.S. Patent No. 5,143,854) and USSN 07/362,901 (filed June 7, 1989, now abandoned).

A2

This application is also related to the following Applications: USSN 07/626,730 (filed December 6, 1990, now U.S. Patent No. 5,547,839); USSN 07/624,114 (filed December 6, 1990, now abandoned); USSN 07/796,243 (filed November 22, 1991, now U.S. Patent No. 5,384,261); USSN 07/796,947 (filed November 22, 1991, now U.S. Patent No. 5,242,974); USSN 07/796,727 (filed November 22, 1991, now U.S. Patent No. 5,242,974); and PCT Publication No. WO 90/15070 (published December 13, 1990).

The disclosures of all of these applications are incorporated herein by reference in their entirety and for all purposes. --

IN THE CLAIMS

Please cancel claims 1-7 in the original specification. Please add the following claims.

A3

-- 8. An apparatus comprising:
a body having a sealed cavity disposed therein, said cavity being less than about 1000 μm deep;
a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polymers; and
an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

9. The apparatus of claim 8, wherein said polymers are polynucleotides.
10. The apparatus of claim 8, wherein said polymers are polypeptides.

11. An apparatus comprising:
a body having a sealed cavity disposed therein, said cavity being less than about 1000 μm deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polynucleotides, and an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

12. The apparatus of claim 11, wherein said cavity is less than about 500 μm deep.

13. An apparatus comprising:
a body having a sealed cavity disposed therein, said cavity being less than about 1000 μm deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polypeptides, and an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

14. The apparatus of claim 13, wherein said cavity is less than about 500 μm deep.

15. An apparatus comprising:
a body having a sealed cavity disposed therein, said cavity being less than 500 μm deep;

a substrate comprising a surface mated to said body, whereby said surface contacts and seals said cavity, wherein said surface comprises polymers; and an inlet port and an outlet port, said inlet port and said outlet port being in fluid communication with said cavity.

16. The apparatus of claim 15 wherein said polymers are polynucleotides.

17. The apparatus of claim 15, wherein said polymers are polypeptides.

18. An apparatus comprising:

a glass substrate having a surface comprising polymers, said surface mated to a body having a cavity for sealing said cavity such that said surface is in fluid communication with said cavity;

an inlet port and an outlet port, said inlet port and said outlet port being in communication with said cavity, wherein said cavity is less than 1000 µm deep;

a fluid flowing means coupled to said inlet port.

19. The apparatus of claim 18, wherein said polymers are polynucleotides.

20. The apparatus of claim 18, wherein said polymers are polypeptides.

21. The apparatus of claim 18, further comprising a pump positioned to flow said fluid into said cavity through said inlet port and out of said cavity through said outlet port.

22. The apparatus of claim 18, further comprising a means for heating said cavity.--

Remarks

With entry of this preliminary amendment, the attached specification, which was originally filed in parent application serial No. 07/805,727, has been amended to update insert further priority data and to update status of parent or related applications. Also, with entry of this preliminary amendment, claims 8-22 are now pending in the subject application. Support for the new claims can be found throughout the specification. The title of the subject application has been accordingly amended to conform to the new claims. No new matter has been introduced by the new claims or amendments to the specification.